

NOTES ON GEOGRAPHIC DISTRIBUTION

**Reptilia, Squamata, Serpentes, Viperidae, *Bothrops lutzi*:
distribution extension, geographic distribution map**

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The family Viperidae comprises 28 species in Brazilian territory, with 23 of them belonging to the genus *Bothrops* Wagler, 1824 (Bérnilds 2009). The *Bothrops neuwiedi* complex presents an ambiguous taxonomic status and seven species (*Bothrops diporus* Cope, 1862, *B. lutzi* (Miranda-Ribeiro, 1915), *B. marmoratus* Silva and Rodrigues, 2008, *B. mattogrossensis* Amaral, 1925, *B. neuwiedi* Wagler, 1824, *B. pauloensis* Amaral, 1925, and *B. pubescens* (Cope, 1870) have been formerly recognized so far (Silva 2004; Silva and Rodrigues 2008).

The distribution of *B. lutzi* is known to central eastern Brazil, which includes Minas Gerais, Bahia, Goiás, Tocantins, Piauí, and Ceará states (Lira-da-Silva et al. 2003; Silva 2004; Borges-Nojosa and Cascon 2005; Freitas and Silva 2007). Here, it is presented a new record for *B. lutzi* extending its geographic distribution northward in relation to the previous reported. Also, an updated distribution map is proposed for the species.

From February 2007 to November 2007, I found 5 specimens (four females, one male) of *B. lutzi* (Figure 1) in the Chapada da Ibiapaba (Plateau of Ibiapaba) between Ubajara and Tianguá municipalities ($03^{\circ}53'29.4''$ S, $41^{\circ}04'30.7''$ O; 796 m above sea level). The Ibiapaba's plateau is a rocky arenitic formation in the frontier of Piauí and Ceará states, belonging

to the *Caatinga* Biome (*sensu* Ab'Saber, 1977). The physiognomy where the specimens were found is classified as Dry Dense Bush Forest, locally known as *Carrasco*, and can be basically characterized as a Forest zone with medium sized trees, up to 4 meters high, where the loss of leaves is higher than 70% during the dry season (June-December). The snout-vent length of the individuals varied from 34 to 72 cm.

A voucher specimen was deposited in the herpetological collection of the *Universidade Federal da Paraíba* (UFPB 4506). Collecting permits were granted by *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis - IBAMA* (# 267/2006).

This finding is the first record for the species in the Ibiapaba's plateau, extending the species' range in ca. 140 km north, in a straight line from the previous report at Brejo Santo municipality, in Southern Ceará (Figure 2; Borges-Nojosa and Cascon 2005). Considering that in Ceará this species is registered only in dry forests located in high altitudes (700 m above sea level) in the border with state of Piauí, it is likely that Ibiapaba's plateau represents the northern limit in the distribution of *B. lutzi* in Brazilian's territory. Therefore, the current distribution knowledge for *B. lutzi* should be considered as presented in Figure 2.

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Figure 1. Specimens of *Bothrops lutzi* found in the present study with their main color patterns and some diagnostics characters. A-C) General view of adult females with snout-vent length of 72.0, 45.2, and 59.0 cm respectively; D) Head detail; E) Ventral color pattern of a juvenile female (SVL = 34 cm); and F) Hemipenis of an adult male SVL = 52.8 cm).



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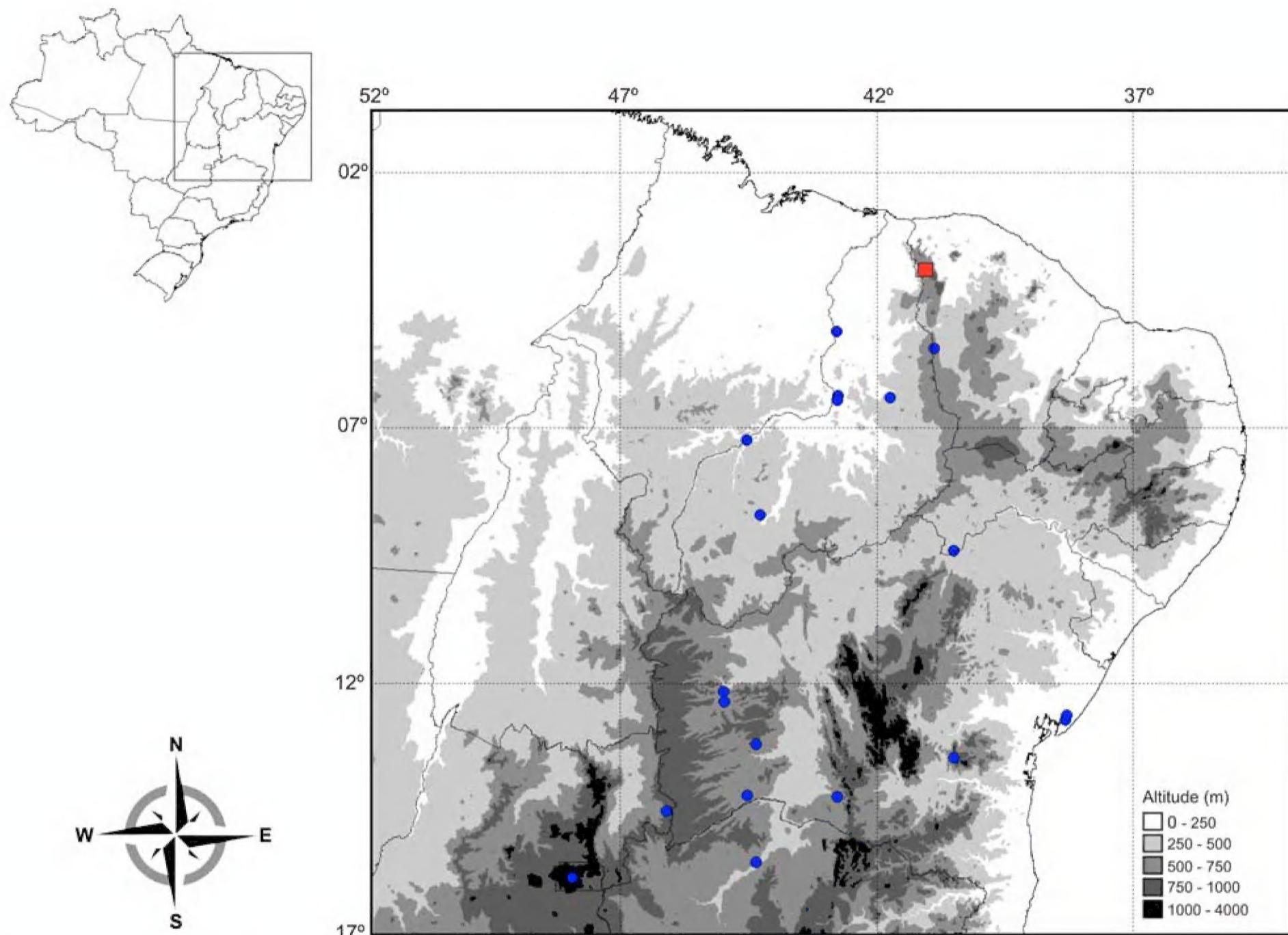


Figure 2. Figure 2. Altitudinal distribution map of *Bothrops lutzi* indicating the previous known localities (blue circles) and the present record (red square).

Literature cited

- Ab'Saber, A. N. 1977. Os Domínios Morfoclimáticos na América do Sul. Primeira aproximação. *Geomorfologia* 52: 1-159.
- Bérnuls, R. S. 2009. Brazilian reptiles - List of species. Electronic Database accessible at <http://www.sbherpetologia.org.br>. Brazilian Society of Herpetology, Brazil. Captured on May 2009.
- Borges-Nojosa, D. M. and P. Cascon. 2005. Herpetofauna da Área Reserva da Serra das Almas, Ceará; p. 243-258 In: F. S. Araújo, M. J. N. Rodal, and M. R. V. Barbosa (ed.), Análise das Variações da Biodiversidade do Bioma Caatinga. Brasília, Ministério do Meio Ambiente.
- Freitas, M. A. and T. F. S. Silva. 2007. A Herpetofauna das Caatingas e áreas de altitude do Nordeste Brasileiro. Pelotas. União Sul-Americana de estudos da Biodiversidade. 388 p.

- Lira-da-Silva, R. M., Y. F. Mise, G. Puerto, and V. X. Silva. 2003. Geographic distribution. *Bothrops neuwiedi lutzi* (Neuwiedi's Lancehead): Bahia. *Herpetological Review* 34(4): 386.
- Silva, V. X. 2004. The *Bothrops neuwiedi* complex; p. 410-422 In: J. A. Campbell and W. W. Lamar (ed.), *The Venomous Reptiles of the Western Hemisphere*. Ithaca. Cornell University Press.
- Silva, V. X. and M. T. Rodrigues. 2008. Taxonomic revision of the *Bothrops neuwiedi* complex (Serpentes, Viperidae) with description of a new species. *Phyllomedusa* 7(1): 45-90.

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